Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An electrolytic cell comprising:

a first container containing an acidic catholyte, wherein the catholyte comprises a metal, optionally in complex with a complexing agent, and wherein a cathode is at least partially disposed within the catholyte, and wherein the first container has a first opening that is configured to receive the catholyte and a second opening that is configured to discharge the catholyte after the catholyte has contacted the second container;

wherein the first container is at least partially disposed in a tank that is configured to receive the catholyte from the second opening and that is configured to provide the catholyte to the first opening;

a pump fluidly coupled to the first container and configured to move ~~moving~~ the catholyte across the cathode at a predetermined flow velocity;

a second container containing an anolyte, wherein the second container is at least partially disposed in the catholyte, wherein the second container comprises a separator that separates the catholyte from the anolyte, and wherein the second container further comprises an anode; and

wherein the cathode and the second container are positioned relative to each other such that a flow path between the second container and cathode is formed from which the metal is deposited onto the cathode at non-current limiting conditions at the flow velocity.

2. (canceled)

3. (canceled)

4. (Original) The electrolytic cell of claim 1 wherein the acidic catholyte comprises sulfuric acid, and wherein the complexing agent is ethylenediamine tetraacetic acid.

5. (Original) The electrolytic cell of claim 1 wherein the cathode comprises titanium, and wherein the anode comprises lead or iridium oxide coated titanium.

6. (Original) The electrolytic cell of claim 1 wherein the anolyte is provided to the second container from an anolyte circulation tank, and wherein the anolyte comprises sulfuric acid.

7. (Original) The electrolytic cell of claim 1 wherein the separator comprises a diaphragm or an ion exchange polymer.

8. (Original) The electrolytic cell of claim 1 wherein the metal has a concentration of less than 5000 ppm.

9. (Original) The electrolytic cell of claim 1 wherein the metal has a concentration of less than 500 ppm.

10. (Original) The electrolytic cell of claim 1 wherein the predetermined flow velocity of the catholyte across the cathode is at least 0.08 m/sec.

11. (Original) The electrolytic cell of claim 1 wherein the metal is deposited as a smooth film.

12. (currently amended) [[An]] A method of operating an electrolytic cell, comprising:

providing an anode plate, a cathode plate, and an electrolyte comprising a metal ~~in complex with a complexing agent~~;

~~a pump fluidly coupled to the electrolytic cell and~~ moving the electrolyte between the anode plate and cathode plate at a ~~predetermined~~ flow velocity such that the flow velocity of the catholyte across the cathode plate provides a Reynolds number (Re) of above 2000; and

positioning ~~wherein~~ the anode plate and the cathode plate ~~are positioned~~ relative to each other such that a flow path is formed between the anode plate and cathode plate from which the metal is deposited onto the cathode plate as a smooth film at non-current limiting conditions at the flow velocity.

13. (currently amended) The method ~~electrolytic cell~~ of claim 12, wherein the cathode is disposed in a cathode container that contains the electrolyte.

14. (currently amended) The method ~~electrolytic cell~~ of claim 13, wherein the anode is disposed in an anode container that includes an anolyte that is circulated between the anode container and an anolyte circulation tank, and wherein the anode container is at least partially disposed in the cathode container.

15. (currently amended) The method ~~electrolytic cell~~ of claim 13, wherein the anode container includes a separator that comprises a diaphragm or an ion exchange polymer.

16. (currently amended) The method ~~electrolytic cell~~ of claim 12, wherein the cathode container is in fluid communication with a tank that contains the electrolyte.

17. (Original) An electrolytic cell comprising:

an electrolyte reservoir that contains an electrolyte in which lead is complexed with a complexing agent;

a first container at least partially disposed within the electrolyte reservoir, wherein the first container further includes a cathode, a first opening that receives the electrolyte from the electrolyte reservoir, and a second opening that provides the electrolyte back to the electrolyte reservoir;

a second container at least partially disposed within the first container, wherein the second container further includes an anolyte and an anode, wherein the anolyte in the second container is separated from the electrolyte in the first container by a separator; and

a pump fluidly coupled to the electrolyte reservoir and moving the electrolyte from the electrolyte reservoir to the first container via the first opening at a rate effective to prevent formation of a diffusion layer in a flow path that is formed between the second container and the cathode.

18. (Original) The electrolytic cell of claim 17 wherein the complexing agent is ethylenediamine tetraacetic acid and wherein the electrolyte further comprises an acid.

19. (Original) The electrolytic cell of claim 17 wherein the separator is a diaphragm or an ion exchange polymer.

20. (Original) The electrolytic cell of claim 17 further comprising an anolyte circulation tank that is fluidly coupled to the second container.

21. (currently amended) An electrolytic cell comprising:

an anode and a cathode, both at least partially in electrical contact with an electrolyte that includes a metal, optionally in complex with a complexing agent, wherein the metal is present in the electrolyte at a concentration of less than 5000 ppm; and

a pump that is configured to allow movement of ~~that moves~~ the electrolyte in a flow path between the anode and the cathode at a flow velocity at which the metal is plated onto the cathode in form of a smooth film under non-current limiting conditions.

22. (Original) The electrolytic cell of claim 21 wherein the pump optionally provides a second flow velocity that is greater than flow velocity, and wherein the metal is plated onto the cathode at the second flow velocity in form other than the smooth film.

23. (Original) The electrolytic cell of claim 21 wherein the metal is present in the electrolyte at a concentration of less than 500 ppm.

24. (Original) The electrolytic cell of claim 21 wherein the metal is present in the electrolyte at a concentration of less than 100 ppm.

25. (currently amended) The electrolytic cell of claim [[21]] 22 wherein the form other than the smooth film is a powdery deposit or a dendritic form.

26. (Withdrawn) A method of immobilizing lead ions in soil previously treated with a complexing agent, comprising admixing a ferric chloride containing solution to the soil.